

Amendment/Response

Reply to non-Final Office action of 31 October 2006

Listing of the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A device for generating ultraviolet radiation by means of an excimer discharge, which device is equipped with an at least partly UV-transparent discharge vessel whose discharge space is filled with a gas filling, with means for triggering and maintaining an excimer discharge in the discharge space, and with a coating that contains a phosphor comprising a host lattice and neodymium(III) as an activator.

2. (original) A device for generating ultraviolet radiation as claimed in claim 1, characterized in that the phosphor contains praseodymium(III) as a co-activator.

3. (currently amended) A device for generating ultraviolet radiation as claimed in claim 1, characterized in that the phosphor is selected from the group consisting of $(La_{1-x}Y_x)PO_4:Nd$ where $0 \leq x \leq 1$; $(La_{1-x}Y_x)PO_4:Nd, Pr$ where $0 \leq x \leq 1$; $SrAl_{12}O_{19}:Nd$; $LaB_3O_6:Nd$; $LaMgB_5O_{10}:Nd$; $SrAl_{12}O_{19}:Nd, Pr$; $LaB_6O_9LaB_3O_6:Nd, Pr$; $LaMgB_5O_{10}:Nd, Pr$ and $GdPO_4:Nd$.

4. (currently amended) A device for generating ultraviolet radiation as claimed in claim 1, characterized in that the ~~phosphor comprises a~~ coating that also contains an oxide selected from the group consisting of MgO , SiO_2 and Al_2O_3 .

5. (currently amended) A device for generating ultraviolet radiation as claimed in claim 1, characterized in that the gas

Amendment/Response

Reply to non-Final Office action of 31 October 2006

filling contains a gas selected from the group consisting of xenon, krypton, argon, neon and helium.

6. (original) A device for generating ultraviolet radiation as claimed in claim 1, characterized in that the gas filling contains xenon.

7. (original) A device for generating ultraviolet radiation as claimed in claim 1, characterized in that the electrodes are composed of a metal or alloy that reflects UV-C light.

8. (original) A device for generating ultraviolet radiation as claimed in claim 1, characterized in that part of the discharge vessel is provided with a coating that acts as a reflector of VUV and/or UV-C light.

9. (currently amended) A method for carrying out a photolytic process using ultraviolet radiation, the method characterized in that the ultraviolet radiation is generated by use of the device claimed in claim 1 for photolytic processes.